



IN THE UNITED STATES OF AMERICA
PATENT AND TRADEMARK OFFICE

APPLICANT: Larry Schlatre & Alan Colby EXAMINER:
SERIAL NO.: 10/713,300 ART UNIT: 2177
FILING DATE: November 14, 2003 DOCKET NO: 16980/100547-00
TITLE: An Integrated System for Routine Maintenance of Mechanized Equipment

DECLARATION UNDER 37 C.F.R. § 1.131 OF ALAN D. COLBY
AND LARRY SCHLATRE

Parish of East Baton Rouge:

State of Louisiana

We, Alan D. Colby and Larry Schlatre, declare as follows:

1. We are the joint inventors of the invention in the above-identified application.
2. I, Alan Colby, was President and Chief Executive Officer of InCircuit Development Corporation ("InCircuit") from 1995 through 2001. In 2001, InCircuit, a software development company, formed TurfCentric, Inc. ("TurfCentric") to exclusively focus on golf and turf markets. I have been President and Chief Executive Officer of TurfCentric from 2002 to present.
3. I, Larry Schlatre, was a consultant for InCircuit from prior to August 18, 2000, through 2001. In 2002, I became Chief Technology Officer of TurfCentric, a position I held until May 2006.
4. Prior to August 18, 2000, we conceived of the invention disclosed in the above-identified application, as evidenced by: (a) a PowerPoint file, named "deerel.ppt" and last modified prior to August 18, 2000, containing a presentation entitled "John Deere and InCircuit:

The Winning Combination,” and an accompanying undated information booklet (collectively, “the Deere Proposal”); (b) an agreement dated prior to August 18, 2000, between InCircuit and Larry Schlatre to provide a number of services related to developing a working model of the invention (“the Schlatre Agreement”); (c) consulting invoices between InCircuit and Schlatre dated March 2000 to August 2000 (“the Schlatre Invoices”); and (d) a document dated prior to August 18, 2000, entitled “An Overview of Grounds and Maintenance Software @ Quail West Golf Maintenance” (“the Quail West Proposal”). The characteristics of the invention are described therein as further explained below. True and correct copies of these references are attached hereto as Exhibits A-D.

5. In 1995, InCircuit, predecessor of the present assignee of the invention, Turfcentric, Inc., released the GCS product, a comprehensive Windows-based desktop turf management system for, among other things, managing parts, inventory and maintenance schedules for mechanized equipment such as tractors, golf carts, and the like. Improving upon the desktop software, we conceived of utilizing the already-existing capabilities of GCS as a host system such that data delivered by GPS and other technologies remote from the GCS server could be accessed by end-users. (*See Deere Proposal, Ex. A, pg. 3.*)

6. Concurrently and prior to August 18, 2000, InCircuit and The Toro Company (“Toro”) entered into a distribution and licensing agreement for InCircuit’s GCS system (“the Toro Agreement”). Pursuant to the Toro Agreement, Toro agreed to maintain the confidentiality of InCircuit’s confidential information and/or trade secrets, an obligation expiring at least as of June 2001, or three years from the termination date of the agreement. A true and correct copy of this Agreement is attached hereto as Exhibit E.

7. Upon information and belief, Toro maintained several test (or beta) facilities used for field testing of potential products with which Toro engaged non-disclosure agreements.

Bonita Bay Golf Course Maintenance Department (Bonita Bay) was one such test facility where, through the Toro Agreement, GCS software was implemented with positive feedback to both Toro and InCircuit. (See Quail West Proposal, Ex. D, p. 2.¹) However, it was noted that the Bonita Bay users experienced frustrating network issues such as computer lock-ups, corrupt data, and agonizingly slow data processing. InCircuit discussed stopgap measures with Toro and Bonita Bay, but ultimately “agreed to redevelop GCS and provide a true client-server solution.” (*Id.*) The Quail West Proposal was generated by InCircuit to submit this “new” GCS system to Bonita Bay and Toro for their consideration for its implementation at the Bonita Bay test facility.

8. The Quail West Proposal discloses a means to transmit a vehicle maintenance trigger to a remote location, as claimed in claims 1, 22, and 24, described as “sensing and communications technology located on equipment directly.” (*Id.*, p. 6) The sensing and communications technology “would allow continuous and real-time updates of equipment meter readings to trigger preventative maintenance events, work order details, equipment utilization data, etc.” (*Id.*, pp. 6-7.) Moreover, such location upon equipment directly would allow this sensing and communication technology to be positionable upon a vehicle within a fleet and as described would receive maintenance trigger signals from the vehicle and transmit such signals to a remote location. (*Id.*) Such maintenance trigger data would include engine hour readings or odometer readings, as claimed in claim 15, in order to trigger equipment utilization data (hours of engine use, for example) or maintenance events (comparing odometer readings to a schedule of required maintenance events at certain mileage intervals, for example). (See *id.*, p. 7.)

9. The Quail West Proposal also discloses a redesigned architecture of the GCS system with a 2- or n-tiered client/server configuration with a centrally-hosted site management

¹ The Quail West Proposal has several page numbers on each page. For consistency throughout this paper, we refer to the facsimile page number in the upper right hand corner of the document.

database accessed via the internet. (*Id.*, p. 5.) This architecture demonstrates a means to determine maintenance requirements of a vehicle based upon a transmitted maintenance trigger as claimed in claims 1, 22 and 24, allowing for customers to benefit from wireless devices integrated with the internet application. (*Id.*, p. 6.) Such devices included Palm® VII personal digital assistants (PDA), as well as sensing and communications technology located on equipment directly, as described above. (*Id.*) The Quail West Proposal also discloses a completely hosted internet application model where GCS and other maintenance and management utilities are accessed via the internet, with a site management database driving decisions. (*Id.*, p. 5.) As shown in this disclosure, we conceived of integrating modules for keeping track of equipment information, such as preventative maintenance requirements, recommended replacement parts, fuel usage, and automatic scheduling of maintenance, with the central host and internet application. (*Id.*, p. 4.) We also contemplated that modules could generate and complete work orders, tracking labor and inventory costs, or maintain inventory and vendor information, creating and receiving purchase orders, etc. (*Id.*) In this manner, the means to transmit is disclosed in periodic communication with the means to determine, as also claimed in claim 23, such as for automated triggering of maintenance events. (*Id.*, p. 7.)

10. The Quail Proposal further discloses a means to alert, as claimed by claims 1, 22, and 24, which encompasses a thin client GCS application or integrated web browser, where GCS and other maintenance/management utilities are accessed by users. (*Id.*, p. 5.) Further, as disclosed in this proposal, “continuous and real-time updates of equipment meter readings” may “trigger maintenance events, work order details regarding operator expenses, equipment utilization data, etc.,” all of which may serve to alert personnel of vehicles requiring service. As described, we conceived of a means to alert communicat[es] with the means to determine from a remote location, particularly through the web browser interface, Palm® handheld devices, and

other wireless communications, as claimed in claim 25, including equipment reading devices located directly on the equipment. (*Id.*, p. 6.)

11. We also conceived of a computer communicating to said means to transmit and said means to alert through a network, as claimed in claim 3. Specifically, we planned a completely internet-based model using a client server configuration as shown therein. (*Id.*, p. 4.)

12. The Quail West Proposal discloses a computer readable memory accessible by the central host such that maintenance schedules with recommended maintenance intervals are stored for scheduled maintenance, as claimed in claim 7. This implementation was conceived by us as a database (*see id.*, p. 4) through which the central host may determine whether maintenance is triggered once data is received from peripheral systems such as handheld devices and sensors positioned upon the equipment (*see id.*, p. 6-7). Information about recommended parts, as claimed in claims 8 and 26, may also be included within this database, where this information may be utilized by our equipment module through the computer network. (*See id.*, p. 3.)

13. Concurrently and prior to August 18, 2000, InCircuit and John Deere Co. ("Deere") entered into discussions regarding the potential acquisition of InCircuit's GCS product family and related technology. (*See Deere Proposal*, Ex. A, slide 7.²) Deere and InCircuit executed an agreement to not disclose proprietary information belonging to either party that was revealed through the discussions for potential acquisition. A true and correct copy of this Agreement is attached hereto as Exhibit F.

14. In conjunction with its acquisition negotiations with Deere, InCircuit submitted to Deere the Deere Proposal, which presented our conception of an electronically enabled community centered on the GCS application, which sprung from an industry-wide demand for

² For consistency herein, the Deere Proposal presentation is referred to by slide number and the Deere Proposal document is referred to by page number.

hardware, software and internet applications to support computerized mechanical maintenance systems. (*Id.*)

15. Like the Quail West Proposal, the Deere Proposal discloses a means to determine, described as a GCS central host within an electronically enabled community. This “family of maintenance applications” includes various modules (equipment maintenance, work orders, etc.) revolving around a central host, which integrates data from these sources, utilizing a database of maintenance information to determine whether maintenance or other services are recommended. (Deere Proposal, Ex. A, p. 2, 3.) As demonstrated in the presentation therein, the Palm® handheld device allowed for entry of an equipment reading, which then triggered a certain set of recommended maintenance options. (*Id.*, slides 10-14.) This interface between Palm® VII PDAs and a central host was developed prior to August 18, 2000. (*Id.*, slides 9-20.) As shown, we conceived of periodical communication between the central host and the means to transmit, directed by users via the Palm® handheld device. (*Id.*, slides 10-14.)

16. The Deere Proposal also discloses a means to alert maintenance personnel of vehicles requiring maintenance. As described with respect to the Palm® handheld device, when “an updated meter reading triggers required service, items requiring service will appear in the Equipment Service module.” (Deere Proposal, Ex. A, slide 14.) Maintenance personnel may “highlight any item to view service requirement details.” (*Id.*) This system is disclosed as a computer communicating to said means to transmit and said means to alert through a network. (Deere Proposal, Ex. A, pg. 1 (describing using the internet as a virtual network for data transfer between the server and client).) As shown, we considered integrating pre-existing GCS capabilities with Palm® handheld devices, the world wide web, global positioning and geographical information systems (GPS, GIS), electronic data exchanges (EDI), automatic identification and data capture (Auto-ID) using radio frequency identification (RFID), radio

frequency data capture (RFDC), and/or biometrics to identify and relay data to and/or from equipment, inventory, personnel and course vegetation. (Deere Proposal, Ex. A, slide 7.) Moreover, these systems would necessarily transmit vehicle identifiers, as claimed in claim 2.

17. As shown in the Deere Proposal's explanation of the Palm® interface, the limitations of claims 4-6 were conceived by us prior to August 18, 2000. Namely, the Palm® handheld device is a personal digital assistant that comprises a computer station having a visual display and a touch screen. (Deere Proposal, Ex. A, slide 9-20.)

18. The Deere Proposal also discloses a computer readable memory accessible by the central host such that maintenance schedules with recommended maintenance intervals are stored for scheduled maintenance. A Palm® handheld device shown would necessarily communicate with the central host over a network such that an input of meter readings associated with a particular piece of equipment would allow a user to access a schedule of required maintenance, stored within a database at the central host, for that piece of equipment based upon the input data. (*Id.*, slide 14.)

19. In describing data delivery through GPS technology, the Deere Proposal discloses a means to transmit a vehicle maintenance trigger to a remote location, which we conceived of as providing data from vehicle activities to the electronically enabled community, i.e., central host and database, so that it may be used by modules requiring such information. (*Id.*, p. 3.)

20. In conceiving of the invention described in the above identified application, we further conceived of a method, as claimed in claim 9, comprising the steps of periodically receiving signals at the host processor containing maintenance trigger data associated with a specific vehicle, comparing trigger data to maintenance schedule data, determining whether maintenance is indicated on that vehicle, and if such maintenance is indicated, identifying each vehicle at a response station. This method is disclosed in the Quail West and Deere Proposals,

where the host processor receives a signal with maintenance trigger data associated with a specific vehicle as directed by the user of a Palm® handheld device (Deere Proposal, Ex. A, slide 14) and compares this data to maintenance schedule data at the stored database (Quail West Proposal, Ex. D, p. 4). If the host processor determines that such maintenance is indicated (Deere Proposal, Ex. A, slide 14), then the Palm® handheld device identifies each vehicle and equipment item requiring service (*id.*). As described, we also conceived of the generation and completion of work orders and detailed maintenance tasks for an identified vehicle in a work order module integrated with the host processor and handheld devices, as claimed in claims 10-12. (Quail West Proposal, Ex. D, p. 3.)

21. Both proposals discussed herein describe a fleet of mechanized outdoor application vehicles utilized at golf courses, as claimed in claims 13-14. In particular, both proposals are directed to outdoor grounds care maintenance equipment such as lawn mowers, sprayers, spreaders and the like. (*See* Deere Proposal, Ex. A, slide 14.)

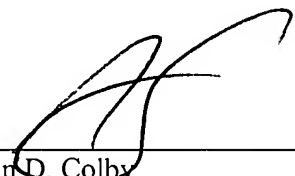
22. In order to reduce our invention to practice from these concepts, InCircuit retained Larry Schlatre to implement a working version of the above-identified invention. In an agreement dated prior to August 18, 2000, Mr. Schlatre agreed to provide a number of services related to developing a working model of the invention (*see* Schlatre Agreement, Ex. B, Section A, p. 3) in exchange for compensation from InCircuit. The agreement was to be effective for “not less than 160 days” (*id.*). As InCircuit continuously worked to implement the conception of the present invention, at least as of August 18, 2000, Schlatre remained an employed consultant, as evidenced by invoices dated through August 18, 2000. (*See* Schlatre Invoices, Ex. C.)

23. Working together, we diligently and continuously labored at our Austin, Texas, and later Baton Rouge, Louisiana, facilities, to complete a working version of the present invention from prior to August 18, 2000, until at least February 2002. At that time, a version of

the invention was disclosed to the public at the 2002 Golf Course Superintendents Association of America Golf Industry Show in Orlando, Florida. We continued to improve and refine the present invention, and filed a provisional patent application Ser. No. 60/427,289 on November 18, 2002. The present application, which was filed November 14, 2003, claims priority to and incorporates by reference this application.

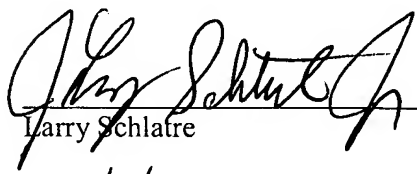
24. We completed the invention of the subject matter which is claimed in the above-described patent application within the United States.

25. We hereby declare that all statements are made herein of our own knowledge, are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Alan D. Colby
12/4/06

Date



Larry Schlatre
12/4/06

Date